Special Issue

Fatigue Crack Growth in Metallic Materials

Message from the Guest Editor

Design against fatigue is fundamental in components submitted to cyclic loads. The damage tolerance approach assumes the presence of small cracks and the propagation life is used to define inspection intervals. The ability to accurately predict fatigue crack growth rates is therefore fundamental. Despite the significant research developed in the last several decades, further work is needed to understand the fundamental mechanisms and to accurately model fatigue crack growth. I invite researchers to submit papers focused on the study of fatigue crack growth in metallic materials. The study of fundamental mechanisms (cyclic plastic deformation, coalescence of microvoids, environmental damage, other brittle mechanisms, etc.) is welcome. The link between these mechanisms, crack tip parameters (linear and non-linear), and fatigue crack growth rates are also welcome. Both original and review papers are welcome.

Guest Editor

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Deadline for manuscript submissions

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